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**T.Y. B.Sc. (Computer Science) (Third Semester) EXAMINATION, 2016****CS-335 : PROGRAMMING IN JAVA-I****Paper V****(2013 PATTERN)****Time : Two Hours****Maximum Marks : 40**

**N.B. :** (i) All questions are compulsory.  
 (ii) Figures to the right indicate full marks.  
 (iii) Neat diagrams must be drawn wherever necessary.

1. Attempt All of the following : [10×1=10]

- Define final variable with an example.
- List any four layout managers.
- What is 'this' ? Give example.
- Name any four tags of Javideo.
- Write any two advantages of inner class.
- What is Applet Viewer ?
- What is the basic difference between 'throw' and 'throws' keywords.
- "Super keyword is used by subclass to refer its immediate superclass." State true or false. Justify
- Define AWT and swing.
- Give two ways to create string object with an example.

2. Attempt any *two* of the following : [2×5=10]

- (a) Explain features of Java in detail.
- (b) Write a note on Garbage collection.
- (c) Write a Java program to set background colour of dialog box using Jcolor chooser.

3. Attempt any *two* of the following : [2×5=10]

- (a) Write a Java program to illustrate multilevel inheritance such that state is inherited from country. City is inherited from state. Display the areas, city, state and country.
- (b) Write a Java program to count number of whitespace character in character stream.
- (c) Explain various ways to read input string from console or keyboard.

4. Solve A or B of the following :

(A) (a) Write a Java program to copy a file to another file. Use proper error handler to handle runtime exception. File names are accepted as argument from command prompt. [5]

(b) Explain different types of streams. [3]

(c) Define anonymous class. [2]

*Or*

(B) (a) Write a note on applet life cycle. [5]

(b) Explain object cloning with one example. [3]

(c) What is an event ? What is an event handling ? [2]

Total No. of Questions—4]

[Total No. of Printed Pages—3

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**T.Y. B.Sc. (Third Semester) EXAMINATION, 2016**

**COMPUTER SCIENCE**

**Paper V**

**(CS-335 : Programming in Java—I)**

**(2013 PATTERN)**

**Time : Two Hours**

**Maximum Marks : 40**

**N.B. :** (i) All questions are compulsory.  
(ii) All questions carry equal marks.  
(iii) Figures to the right indicate full marks.

**1. Attempt All of the following : [1x10=10]**

- (a) What is JavaP ?
- (b) What is Array ? How to create an array of elements of double type ?
- (c) Can we overload main( ) method in Java ? Justify.
- (d) Write a signature of finalize( ) method.
- (e) What is the use of super keyword ?
- (f) What is the use of finally keyword ?
- (g) List any *four* layout managers in Java.
- (h) What is package ? How to create a package ?
- (i) List constructors of JText Area Class (any *two*).
- (j) What are the advantages of Inner Classes (any *two*) ?

P.T.O.

2. Attempt any *two* of the following : [2x5=10]

- (a) Differentiate between Java and C++.
- (b) What is interface ? How does it differ from an abstract class ? Explain.
- (c) Write a Java program to get file name from command prompt. Check whether a file by given name exists. If file is a regular file, then display various details about that file. But if it is a directory, then display number of files in that directory.

3. Attempt any *two* of the following : [2x5=10]

- (a) What is object cloning ? Explain with example.
- (b) List and describe any *five* methods of Reader class along with their syntax.
- (c) Explain JOptionPane class with their static methods.

4. Attempt (A or B) of the following :

(A) (a) Write a Java Program that contains a class Account with acc\_no, name and balance as fields. accept( ), withdraw( ), deposit( ) as methods. If balance < 500 than raise exception "MinimumBalanceException". If name contains digits than raise exception "InvalidNameException". [5]

(b) Write a note on Applet tags. [3]

(c) Explain any *two* methods of string class with example. [2]

*Or*

(B) (a) Design a screen in Java using AWT to handle the mouse events and display the positions of mouse click in text-box. [5]

(b) Explain garbage collection in Java. [3]

(c) What is the use of static methods and static variables ? [2]

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**T.Y. B.Sc. (Third Semester) EXAMINATION, 2017****COMPUTER SCIENCE****Paper V**

(CS-335 : Programming in Java—I)

(2013 PATTERN)

Time : Two Hours

Maximum Marks : 40

N.B. :— (i) All questions are compulsory.

- (ii) Figures to the right indicate full marks.
- (iii) All questions carry equal marks.

1. Attempt *all* of the following [10x1=10]

- (a) What is Javadoc ?
- (b) List primitive data types in Java with their width in bits.
- (c) What is the use of this keyword in Java ?
- (d) What is AutoBoxing and unboxing ?
- (e) What is assertion ?
- (f) What is the use of final keyword ?
- (g) What is an adapter class ?
- (h) One interface can implement another interface. True/False—Justify.
- (i) List any four methods of JButton class.
- (j) Differentiate '==' and equals( ).

P.T.O.

2. Attempt any two of the following : [2x5=10]

- (a) Why is Java called purely object oriented programming language ? Explain features of Java.
- (b) Create an abstract class order having members id and description. Create two subclasses PurchaseOrder and SalesOrder with member customer name and vendor name respectively. Define methods accept and display in all classes. Create 5 objects each of PurchaseOrder and SalesOrder. Accept and display details.
- (c) Write a Java program to accept a file name from command prompt. If the file exists, then display number of words and lines in that file using FileReader class.

3. Attempt any two of the following : [2x5=10]

- (a) What is wrapper class ? Explain with example.
- (b) List and describe any five methods of InputStream class along with their syntax.
- (c) Explain JComboBox class with their constructor and methods.

4. Attempt 'A' or 'B' of the following :

- (A) (a) Write a Java program to accept email address of a user and throw a user defined exception InvalidEmailException if it starts with digit or does not contain @ symbol. [5]

(b) Explain in detail the Applet life cycle with diagram. [3]  
(c) Differentiate String and StringBuffer classes. [2]

Or

(B) (a) Write a Java program using AWT to print "Welcome to T.Y. B.Sc. Computer Science" with Times New Roman font face and size is 16 in Red Color. When we click on a button text color should change to Blue. [5]  
(b) Explain method overriding with example. [3]  
(c) What is Package ? How to create a package ? Give example. [2]